RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/530, 06/Source: 150/6Date Processed by STIC: 3-8-06

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 03/08/2006
PATENT APPLICATION: US/10/530,061 TIME: 10:21:50

Input Set : F:\2633USMM.APP

```
3 <110> APPLICANT: SIDNEY, JOHN
             SOUTHWOOD, SCOTT
              SETTE, ALESSANDRO
      7 <120> TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
      9 <130> FILE REFERENCE: 2060.033US02/EKS/M-M
     11 <140> CURRENT APPLICATION NUMBER: 10/530,061
C--> 12 <141> CURRENT FILING DATE: 2005-04-04
     14 <150> PRIOR APPLICATION NUMBER: PCT/US03/31308
     15 <151> PRIOR FILING DATE: 2003-10-03
     17 <150> PRIOR APPLICATION NUMBER: 60/416,207
     18 <151> PRIOR FILING DATE: 2002-10-03
     20 <150> PRIOR APPLICATION NUMBER: 60/417,269
     21 <151> PRIOR FILING DATE: 2002-10-08
     23 <160> NUMBER OF SEQ ID NOS: 2503
     25 <170> SOFTWARE: PatentIn version 3.3
    27 <210> SEQ ID NO: 1
    28 <211> LENGTH: 9
     29 <212> TYPE: PRT
    30 <213> ORGANISM: Artificial Sequence
    32 <220> FEATURE:
     33 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
              peptide
    36 <400> SEQUENCE: 1
    37 Ala Tyr Gly Pro Gly Pro Gly Lys Phe
    41 <210> SEQ ID NO: 2
    42 <211> LENGTH: 9
     43 <212> TYPE: PRT
    44 <213> ORGANISM: Artificial Sequence
    46 <220> FEATURE:
    47 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
             peptide
    50 <400> SEQUENCE: 2
    51 Ala Glu Ile Pro Tyr Leu Ala Lys Tyr
    55 <210> SEQ ID NO: 3
    56 <211> LENGTH: 9
    57 <212> TYPE: PRT
    58 <213> ORGANISM: Artificial Sequence
    60 <220> FEATURE:
    61 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
             peptide
    64 <400> SEQUENCE: 3
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Input Set : F:\2633USMM.APP

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65 Ala Ala Asp Ala Ala Ala Lys Tyr
66 1
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70 <211> LENGTH: 9
71 <212> TYPE: PRT
72 <213> ORGANISM: Epstein-Barr virus
74 <400> SEQUENCE: 4
75 Ala Tyr Ser Ser Trp Met Tyr Ser Tyr
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 9
81 <212> TYPE: PRT
82 <213> ORGANISM: Influenza A virus
84 <400> SEOUENCE: 5
85 Leu Ala Glu Lys Thr Met Lys Glu Tyr
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 9
91 <212> TYPE: PRT
92 <213> ORGANISM: Neisseria gonorrhoeae
94 <400> SEQUENCE: 6
95 Gly Thr Tyr Asp Tyr Trp Ala Gly Tyr
99 <210> SEQ ID NO: 7
100 <211> LENGTH: 10
101 <212> TYPE: PRT
102 <213> ORGANISM: Neisseria gonorrhoeae
104 <400> SEQUENCE: 7
105 Leu Ser Val His Ser Ile Gln Asn Asp Tyr
106 1
                    5
                                         10
109 <210> SEQ ID NO: 8
110 <211> LENGTH: 10
111 <212> TYPE: PRT
112 <213> ORGANISM: Neisseria gonorrhoeae
114 <400> SEQUENCE: 8
115 Asp Thr Gly Gln Cys Pro Glu Leu Val Tyr
116 1
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 10
121 <212> TYPE: PRT
122 <213> ORGANISM: Hepatitus B virus
124 <400> SEQUENCE: 9
125 Asp Leu Leu Asp Thr Ala Ser Ala Leu Tyr
129 <210> SEQ ID NO: 10
130 <211> LENGTH: 9
131 <212> TYPE: PRT
132 <213> ORGANISM: Hepatitus B virus
134 <400> SEQUENCE: 10
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Input Set : F:\2633USMM.APP

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135 Trp Phe His Ile Ser Cys Leu Thr Phe
136 1
139 <210> SEQ ID NO: 11
140 <211> LENGTH: 10
141 <212> TYPE: PRT
142 <213> ORGANISM: Hepatitus B virus
144 <400> SEQUENCE: 11
145 Leu Ser Leu Asp Val Ser Ala Ala Phe Tyr
146 1
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 10
151 <212> TYPE: PRT
152 <213> ORGANISM: Hepatitus B virus
154 <400> SEQUENCE: 12
155 Leu Ser Gly Pro Gly Pro Gly Ala Phe Tyr
156 1
                                         10
159 <210> SEQ ID NO: 13
160 <211> LENGTH: 10
161 <212> TYPE: PRT
162 <213> ORGANISM: Hepatitus B virus
164 <400> SEQUENCE: 13
165 Leu Ser Leu Gly Pro Gly Pro Gly Phe Tyr
166 1
                    5
169 <210> SEQ ID NO: 14
170 <211> LENGTH: 10
171 <212> TYPE: PRT
172 <213> ORGANISM: Hepatitus B virus
174 <400> SEQUENCE: 14
175 Leu Ser Leu Asp Gly Pro Gly Pro Gly Tyr
176 1
                                        10
179 <210> SEQ ID NO: 15
180 <211> LENGTH: 10
181 <212> TYPE: PRT
182 <213> ORGANISM: Hepatitus B virus
184 <400> SEQUENCE: 15
185 Lys Thr Tyr Gly Arg Lys Leu His Leu Tyr
189 <210> SEQ ID NO: 16
190 <211> LENGTH: 10
191 <212> TYPE: PRT
192 <213> ORGANISM: Hepatitus B virus
194 <400> SEQUENCE: 16
195 Lys Thr Gly Pro Gly Pro Gly His Leu Tyr
199 <210> SEQ ID NO: 17
200 <211> LENGTH: 10
201 <212> TYPE: PRT
202 <213> ORGANISM: Hepatitus B virus
204 <400> SEQUENCE: 17
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Input Set : F:\2633USMM.APP

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205 Lys Thr Tyr Gly Pro Gly Pro Gly Leu Tyr
                                         10
206 1
209 <210> SEQ ID NO: 18
210 <211> LENGTH: 10
211 <212> TYPE: PRT
212 <213> ORGANISM: Hepatitus B virus
214 <400> SEQUENCE: 18
215 Lys Thr Tyr Gly Gly Pro Gly Pro Gly Tyr
                                         10
216 1
219 <210> SEQ ID NO: 19
220 <211> LENGTH: 8
221 <212> TYPE: PRT
222 <213> ORGANISM: Hepatitus B virus
224 <400> SEQUENCE: 19
225 Lys Tyr Thr Ser Phe Pro Trp Leu
226 1
229 <210> SEQ ID NO: 20
230 <211> LENGTH: 10
231 <212> TYPE: PRT
232 <213> ORGANISM: Hepatitus B virus
234 <400> SEQUENCE: 20
235 Phe Ala Ala Pro Phe Thr Gln Cys Gly Tyr
236 1
                                         10
239 <210> SEQ ID NO: 21
240 <211> LENGTH: 10
241 <212> TYPE: PRT
242 <213> ORGANISM: Hepatitus B virus
244 <400> SEQUENCE: 21
245 Ser Tyr Gln His Phe Arg Lys Leu Leu Leu
249 <210> SEQ ID NO: 22
250 <211> LENGTH: 10
251 <212> TYPE: PRT
252 <213> ORGANISM: Hepatitus B virus
254 <400> SEQUENCE: 22
255 Leu Tyr Ser His Pro Ile Ile Leu Gly Phe
259 <210> SEQ ID NO: 23
260 <211> LENGTH: 9
261 <212> TYPE: PRT
262 <213> ORGANISM: Hepatitus B virus
264 <400> SEQUENCE: 23
265 Met Ser Thr Thr Asp Leu Glu Ala Tyr
269 <210> SEQ ID NO: 24
270 <211> LENGTH: 11
271 <212> TYPE: PRT
272 <213> ORGANISM: Hepatitus C virus
274 <400> SEQUENCE: 24
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Input Set : F:\2633USMM.APP

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275 Met Tyr Val Gly Gly Pro Gly Pro Gly Val Phe
276 1
                                         10
279 <210> SEQ ID NO: 25
280 <211> LENGTH: 8
281 <212> TYPE: PRT
282 <213> ORGANISM: Hepatitus C virus
284 <400> SEQUENCE: 25
285 Val Met Gly Ser Ser Tyr Gly Phe
286 1
289 <210> SEQ ID NO: 26
290 <211> LENGTH: 10
291 <212> TYPE: PRT
292 <213> ORGANISM: Hepatitus C virus
294 <400> SEOUENCE: 26
295 Glu Val Asp Gly Val Arg Leu His Arg Tyr
296 1
                                         10
299 <210> SEQ ID NO: 27
300 <211> LENGTH: 10
301 <212> TYPE: PRT
302 <213> ORGANISM: Human immunodeficiency virus
304 <400> SEQUENCE: 27
305 Arg Thr Glu Ile Leu Asp Leu Trp Val Tyr
306 1
                                         10
309 <210> SEQ ID NO: 28
310 <211> LENGTH: 10
311 <212> TYPE: PRT
312 <213> ORGANISM: Human immunodeficiency virus
314 <400> SEQUENCE: 28
315 Arg Gln Asp Ile Leu Asp Leu Trp Val Tyr
316 1
                                         10
319 <210> SEQ ID NO: 29
320 <211> LENGTH: 10
321 <212> TYPE: PRT
322 <213> ORGANISM: Human immunodeficiency virus
324 <400> SEQUENCE: 29
325 Arg Thr Asp Ile Leu Asp Leu Trp Val Tyr
329 <210> SEQ ID NO: 30
330 <211> LENGTH: 9
331 <212> TYPE: PRT
332 <213> ORGANISM: Human immunodeficiency virus
334 <400> SEQUENCE: 30
335 Tyr Thr Asp Gly Pro Gly Ile Arg Tyr
339 <210> SEQ ID NO: 31
340 <211> LENGTH: 9
341 <212> TYPE: PRT
342 <213> ORGANISM: Human immunodeficiency virus
344 <400> SEQUENCE: 31
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/530,061

DATE: 03/08/2006 TIME: 10:21:51

Input Set : F:\2633USMM.APP

Output Set: N:\CRF4\03082006\J530061.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:171; Xaa Pos. 7
Seq#:199; Xaa Pos. 5,8
Seq#:200; Xaa Pos. 4,5,6
Seq#:201; Xaa Pos. 7,8
Seq#:202; Xaa Pos. 2,7
Seg#:203; Xaa Pos. 7
Seq#:204; Xaa Pos. 3,4
Seq#:205; Xaa Pos. 1,5,8
Seq#:210; Xaa Pos. 2
Seq#:736; Xaa Pos. 4
Seq#:737; Xaa Pos. 7
Seq#:738; Xaa Pos. 2,3,6
Seq#:739; Xaa Pos. 7,8,10
Seq#:932; Xaa Pos. 3,9
Seq#:933; Xaa Pos. 5
Seg#:934; Xaa Pos. 9
Seg#:935; Xaa Pos. 4,6,9
Seq#:936; Xaa Pos. 4,5,6,9
Seq#:981; Xaa Pos. 1,3
Seg#:1556; Xaa Pos. 4,5
Seq#:1557; Xaa Pos. 8,9
```

DATE: 03/08/2006

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/530,061 TIME: 10:21:51

Input Set : F:\2633USMM.APP

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:171 after pos.:0
L:2040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:199 after pos.:0
L:2059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:200 after pos.:0
L:2078 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:201 after pos.:0
L:2102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202 after pos.:0
L:2121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:0
L:2140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:0
L:2169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:0
L:2244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:210 after pos.:0
L:7549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:736 after pos.:0
L:7568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:737 after pos.:0
L:7592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:738 after pos.:0
L:7616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:739 after pos.:0
L:9572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:932 after pos.:0
L:9591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:933 after pos.:0
L:9610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:934 after pos.:0
L:9639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:935 after pos.:0
L:9663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:936 after pos.:0
L:10171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:981 after pos.:0
L:16079 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1556 after pos.:0
L:16098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1557 after pos.:0
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